



User Experience Specification Documents

Casper DreamTeam	
Maor	UX Lead
David D.	UX/Project Manager
Michelle	UX Designer

Overview

Project Overview

Goal

Casper, the pioneer of the “bed in a box” space, is a cutting edge purveyor of mattresses, pillows, and sheets. As a company obsessed with perfecting sleep, we designed a smart sleep application that allows its users to improve their sleep habits. We achieve this through synthesizing information from the user’s daily life such as traffic and calendar data to inform their sleep decisions and meet their sleep related goals. As a result, Casper will be even more synonymous with better sleep, delight consumers, and hopefully sell more of their products.

Opportunity

Currently, the sleep application market consists of two types of players, namely sleep tracking and smart alarms. Neither of these types of applications offer actionable insights as to how the user should go about improving their sleep. *DreamTeam* by Casper seeks to rectify this in a way that is both enjoyable and relatable.






Table of Contents

- Chapter 01** Style Guide
- Chapter 02** High-Level Information Architecture
(High Level App Map / Navigation Structure)
- Chapter 03** High Fidelity Screens & Annotations
- Chapter 04** Link to live prototype

San Francisco Font

Title	Thin 36 pt
Subtitle	Semibold 18pt
Body 1	Regular 14pt
Body/Menu	Ultralight 14pt

Colors

	HEX Value	Opacity
 Primary	#162A75	100%
 Secondary	#85CCBD	100%
 Tertiary	#D7F1FB	100%
 Accent	#EC5446	100%
 Accent	#F6E8A3	100%

Style Guide

Logo

Casper



Description

The Color Contrast Check Tool allows to specify a foreground and a background color and determine if they provide enough of a contrast "when viewed by someone having color deficits or when viewed on a black and white screen"[W3C].

The tool will indicate that the colors pass the test if both the color difference and the brightness difference exceed their threshold. It will indicate that it sort of passes if only one of the two values exceed their threshold. And finally, it'll fail to pass if neither value exceeds its threshold.

The tool will also indicate if the colors pass the newer WCAG 2.0 contrast ratio formula. The WCAG 2.0 formula differentiates between text smaller than 18pt and text larger than 18pt (or text that is bold and larger than 14pt). For AA compliance, text should have a ratio of at least 4.5:1 (larger text, at least 3:1). For AAA compliance, text should have a ratio of at least 7:1 (larger text, at least 4.5:1).

You can enter a three character value (eg: 036) and it'll automatically convert it to it's six character version.

ADA compatibility
Color Contrast Check

Foreground Colour:	Background Colour:	Results
# 293275	# D7F1FB	This is example text. Some of it bolded. Some of it italicized.
Red: [Slider]	Red: [Slider]	Brightness Difference: (>= 125) 179.419
Green: [Slider]	Green: [Slider]	Colour Difference: (>= 500) 499
Blue: [Slider]	Blue: [Slider]	Are colours compliant? sort of..
Hue (°): [Slider]	Hue (°): [Slider]	Contrast Ratio 9.88
Saturation (%): [Slider]	Saturation (%): [Slider]	WCAG 2 AA Compliant YES
Value (%): [Slider]	Value (%): [Slider]	WCAG 2 AA Compliant (18pt+) YES
		WCAG 2 AAA Compliant YES
		WCAG 2 AAA Compliant (18pt+) YES

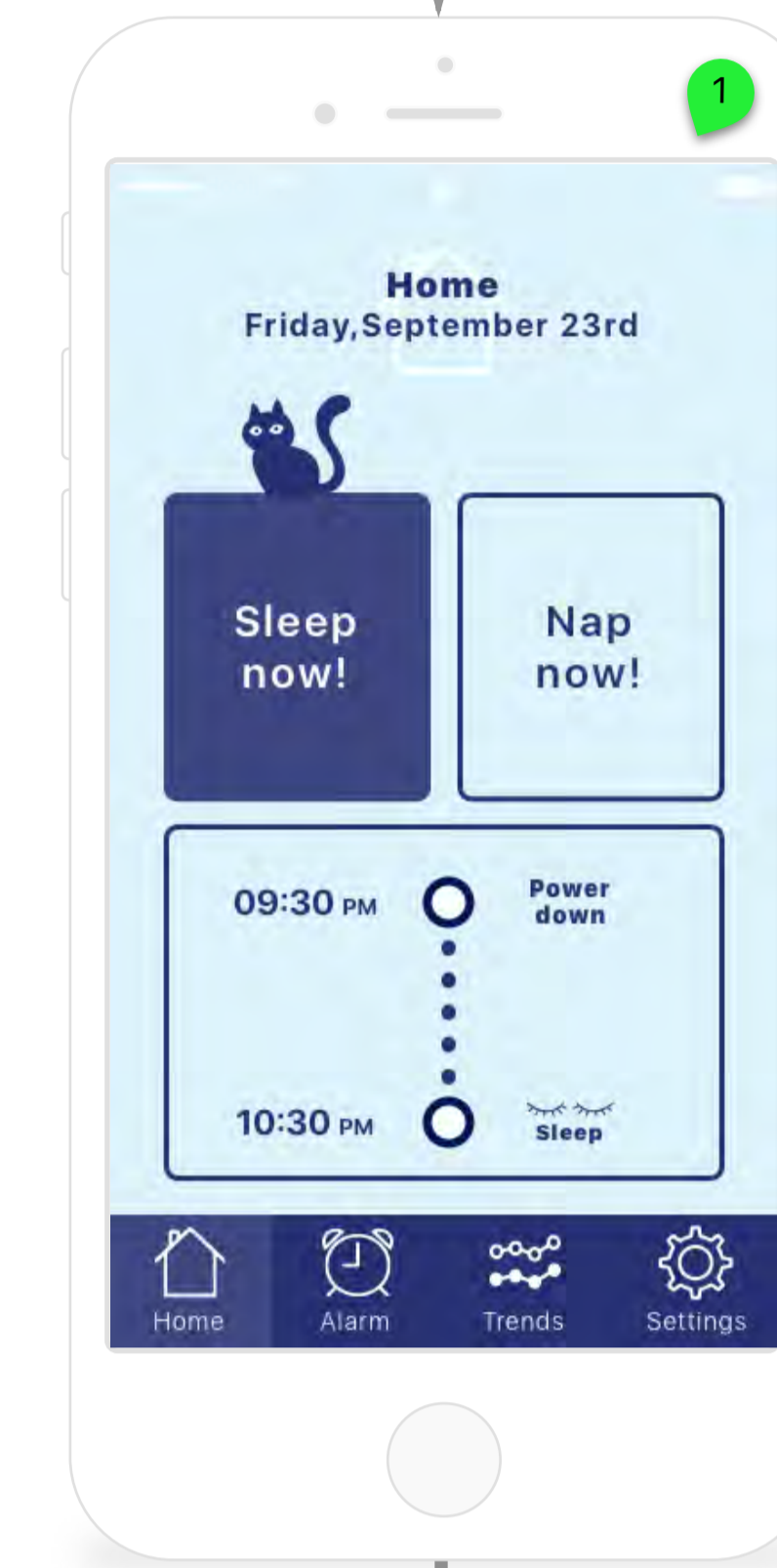
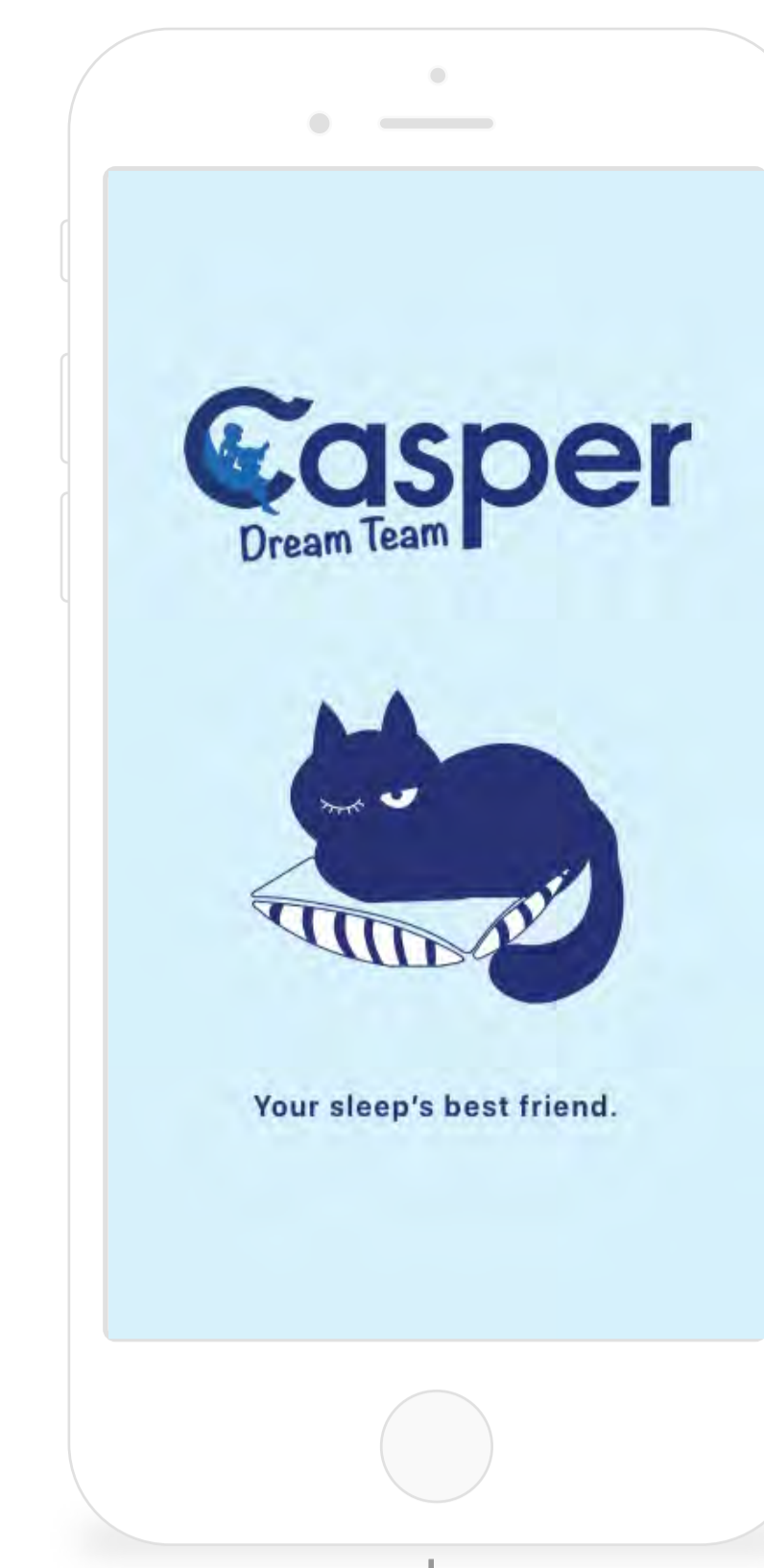
Foreground Colour:	Background Colour:	Results
# 293275	# F6EBAC	This is example text. Some of it bolded. Some of it italicized.
Red: [Slider]	Red: [Slider]	Brightness Difference: (>= 125) 176.16
Green: [Slider]	Green: [Slider]	Colour Difference: (>= 500) 448
Blue: [Slider]	Blue: [Slider]	Are colours compliant? sort of..
Hue (°): [Slider]	Hue (°): [Slider]	Contrast Ratio 9.63
Saturation (%): [Slider]	Saturation (%): [Slider]	WCAG 2 AA Compliant YES
Value (%): [Slider]	Value (%): [Slider]	WCAG 2 AA Compliant (18pt+) YES
		WCAG 2 AAA Compliant YES
		WCAG 2 AAA Compliant (18pt+) YES

Foreground Colour:	Background Colour:	Results
# 293275	# D0D0C2	This is example text. Some of it bolded. Some of it italicized.
Red: [Slider]	Red: [Slider]	Brightness Difference: (>= 125) 132.321
Green: [Slider]	Green: [Slider]	Colour Difference: (>= 500) 338
Blue: [Slider]	Blue: [Slider]	Are colours compliant? sort of..
Hue (°): [Slider]	Hue (°): [Slider]	Contrast Ratio 8.63
Saturation (%): [Slider]	Saturation (%): [Slider]	WCAG 2 AA Compliant YES
Value (%): [Slider]	Value (%): [Slider]	WCAG 2 AA Compliant (18pt+) YES
		WCAG 2 AAA Compliant NO
		WCAG 2 AAA Compliant (18pt+) YES

Foreground Colour:	Background Colour:	Results
# FFFFFFF	# 293275	This is example text. Some of it bolded. Some of it italicized.
Red: [Slider]	Red: [Slider]	Brightness Difference: (>= 125) 200.051
Green: [Slider]	Green: [Slider]	Colour Difference: (>= 500) 557
Blue: [Slider]	Blue: [Slider]	Are colours compliant? YES
Hue (°): [Slider]	Hue (°): [Slider]	Contrast Ratio 11.62
Saturation (%): [Slider]	Saturation (%): [Slider]	WCAG 2 AA Compliant YES
Value (%): [Slider]	Value (%): [Slider]	WCAG 2 AA Compliant (18pt+) YES
		WCAG 2 AAA Compliant YES
		WCAG 2 AAA Compliant (18pt+) YES

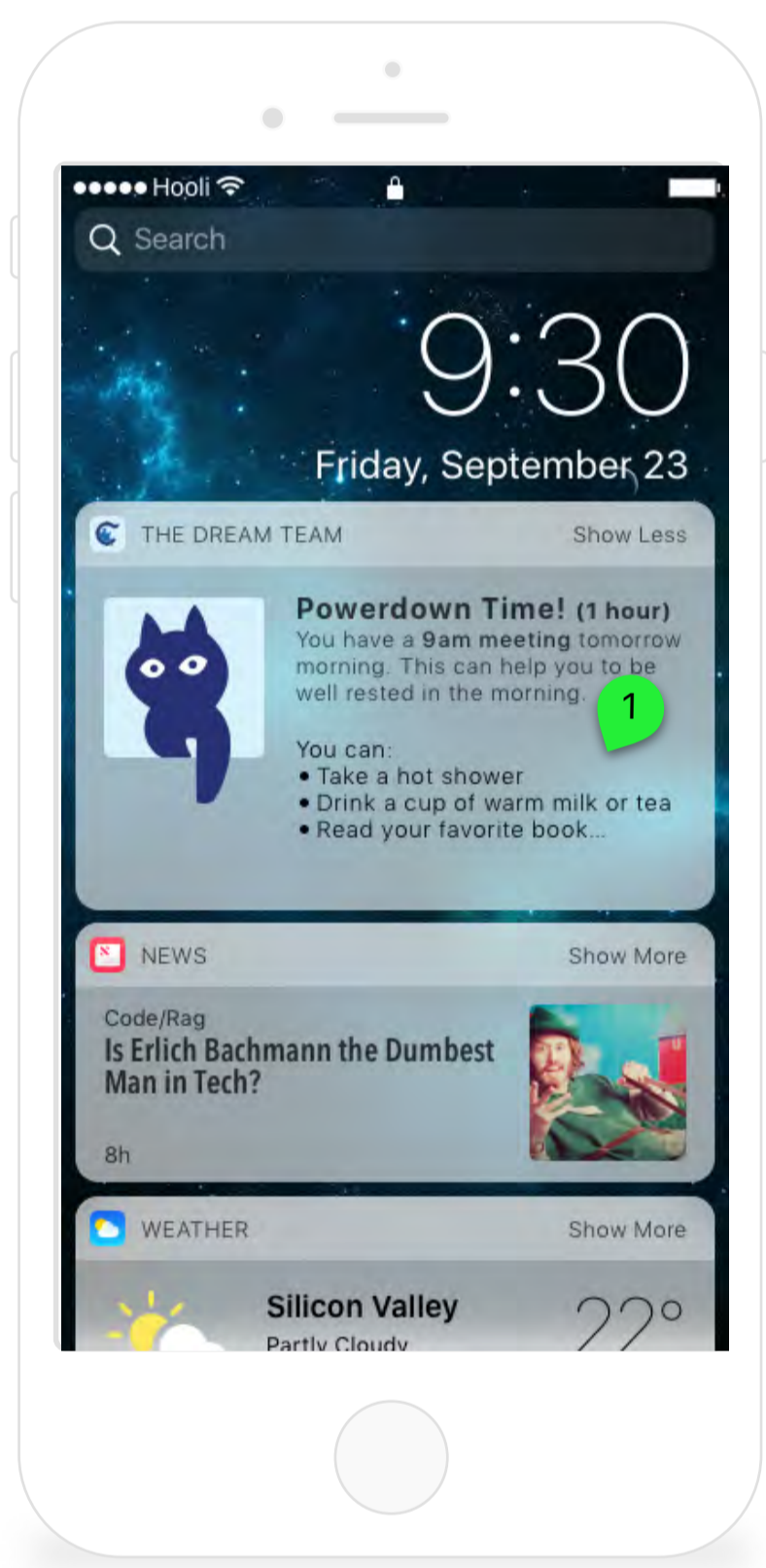
https://snook.ca/technical/colour_contrast/colour.html#fg=293275,bg=F6EBAC

App Map

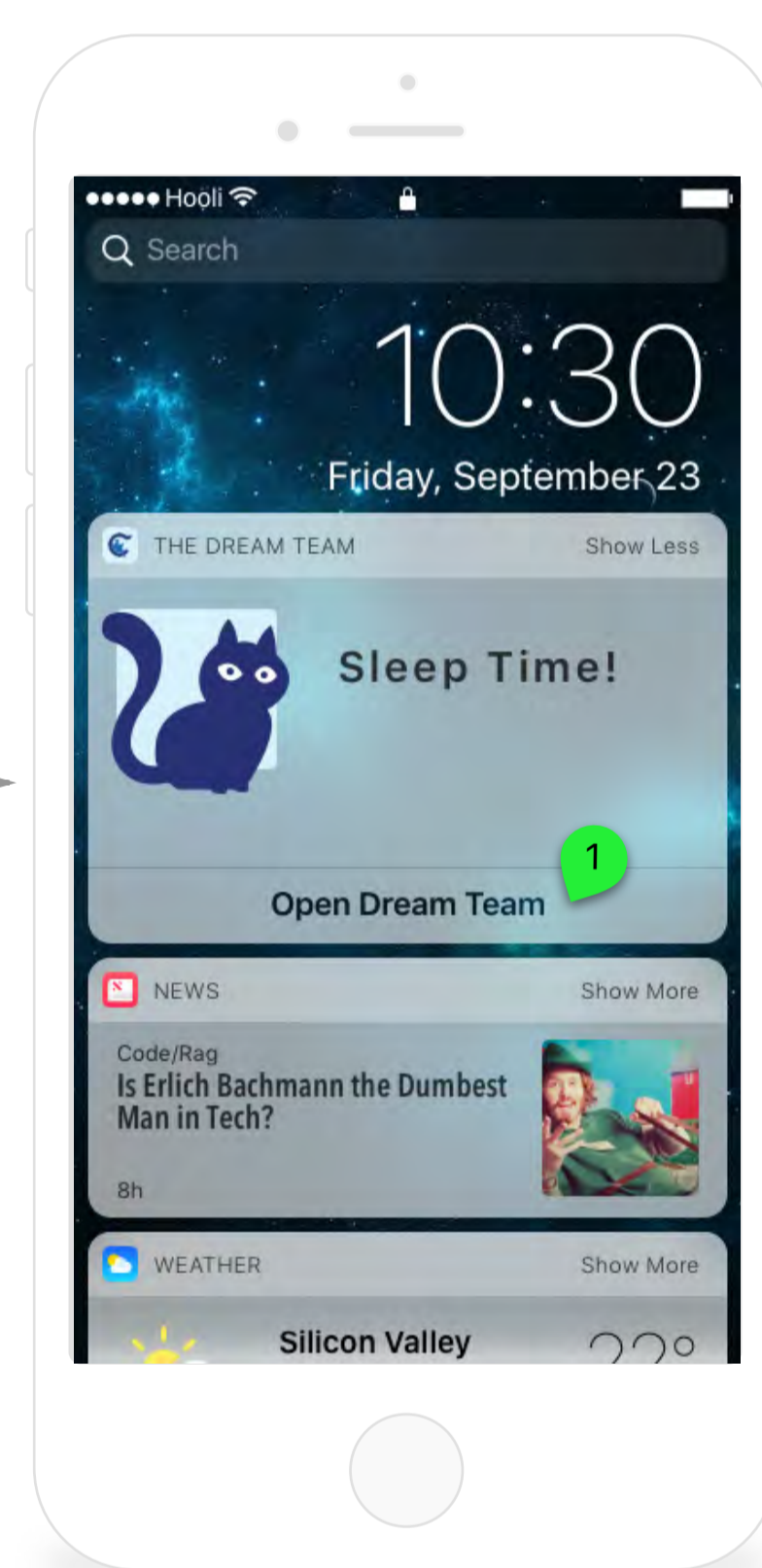
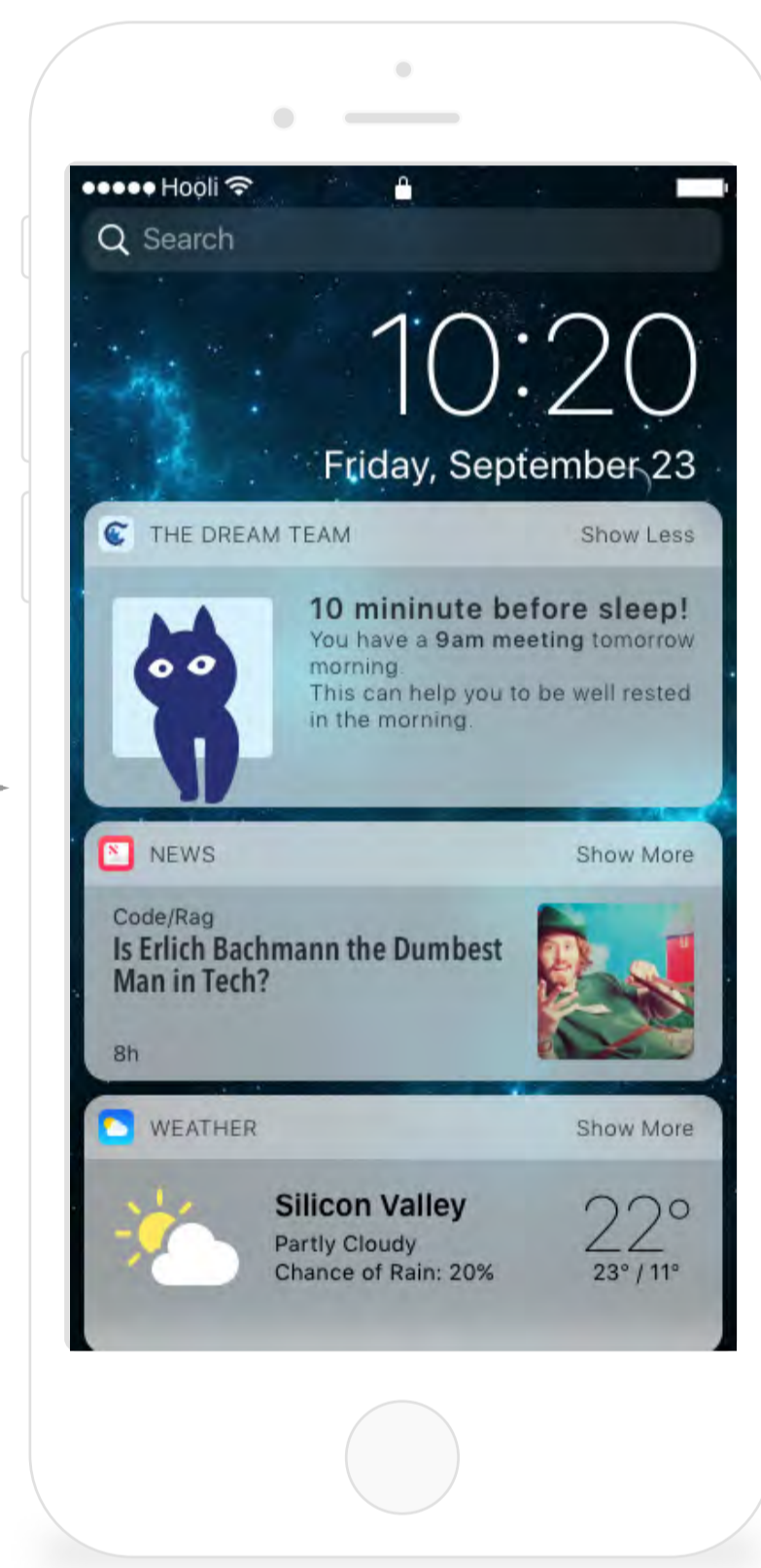


Currently not built out in the prototype.

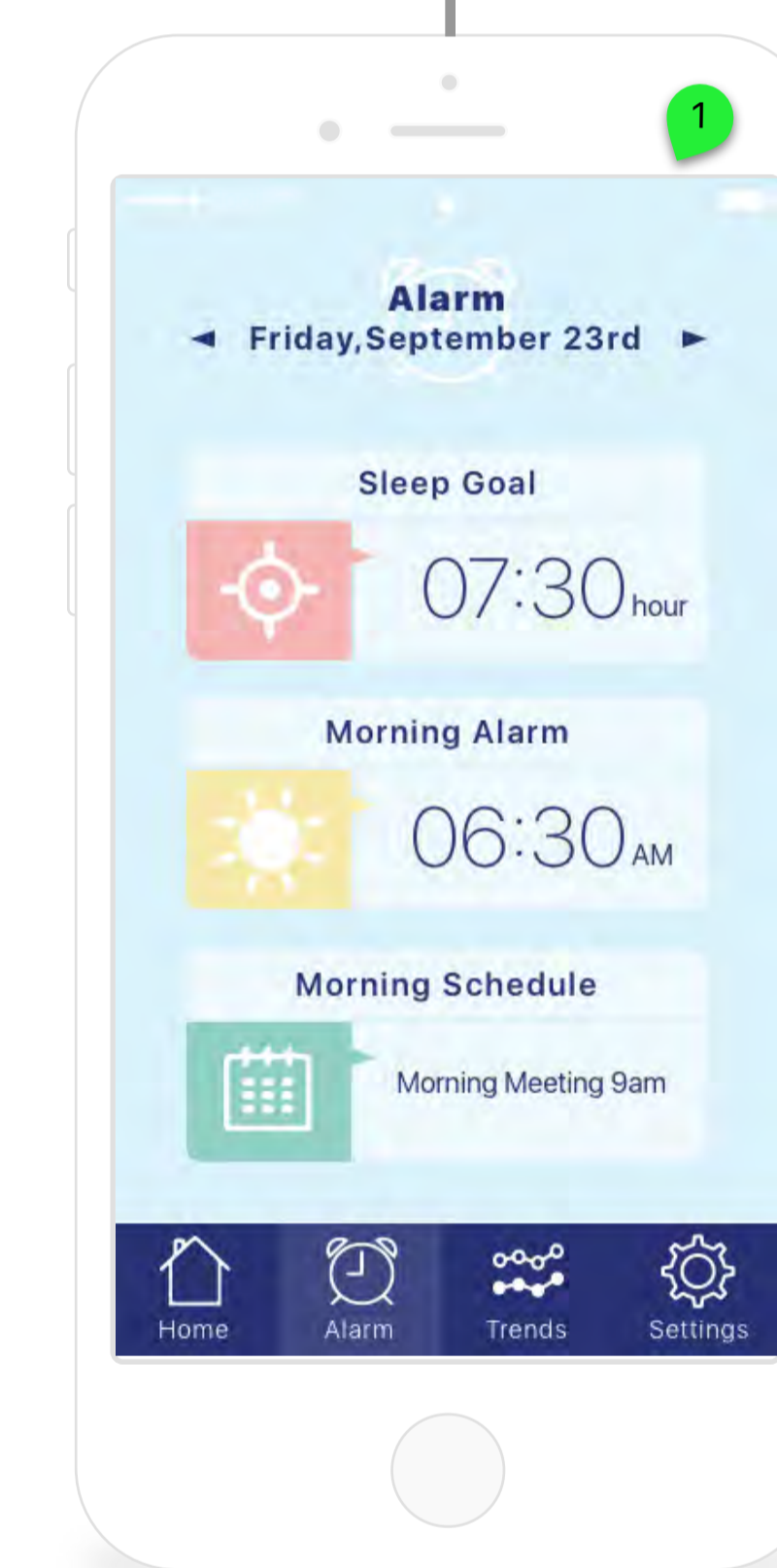
User journey beginning from the Notifications panel.



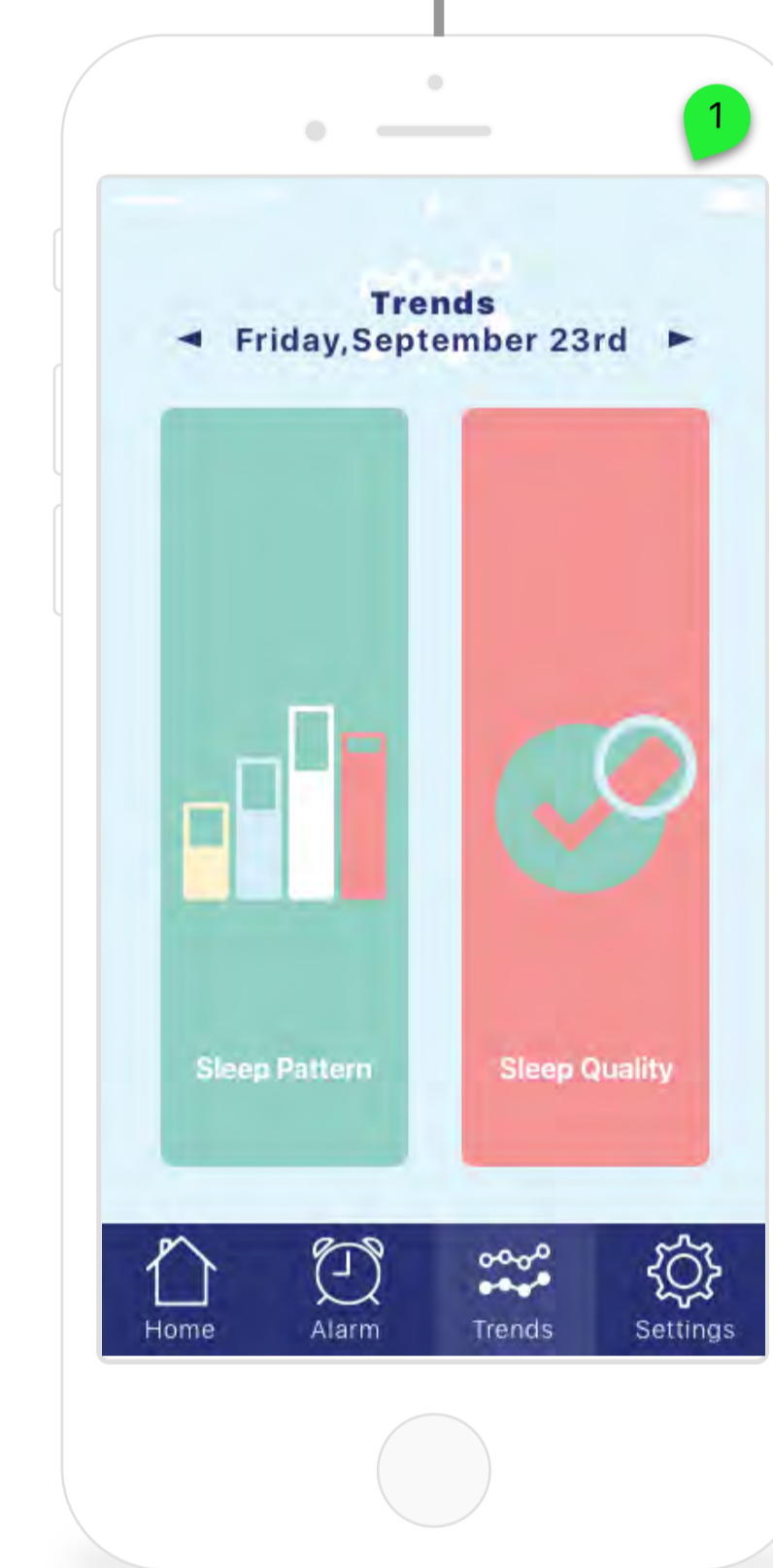
1. Following iOS 10 conventions, you swipe left to clear.



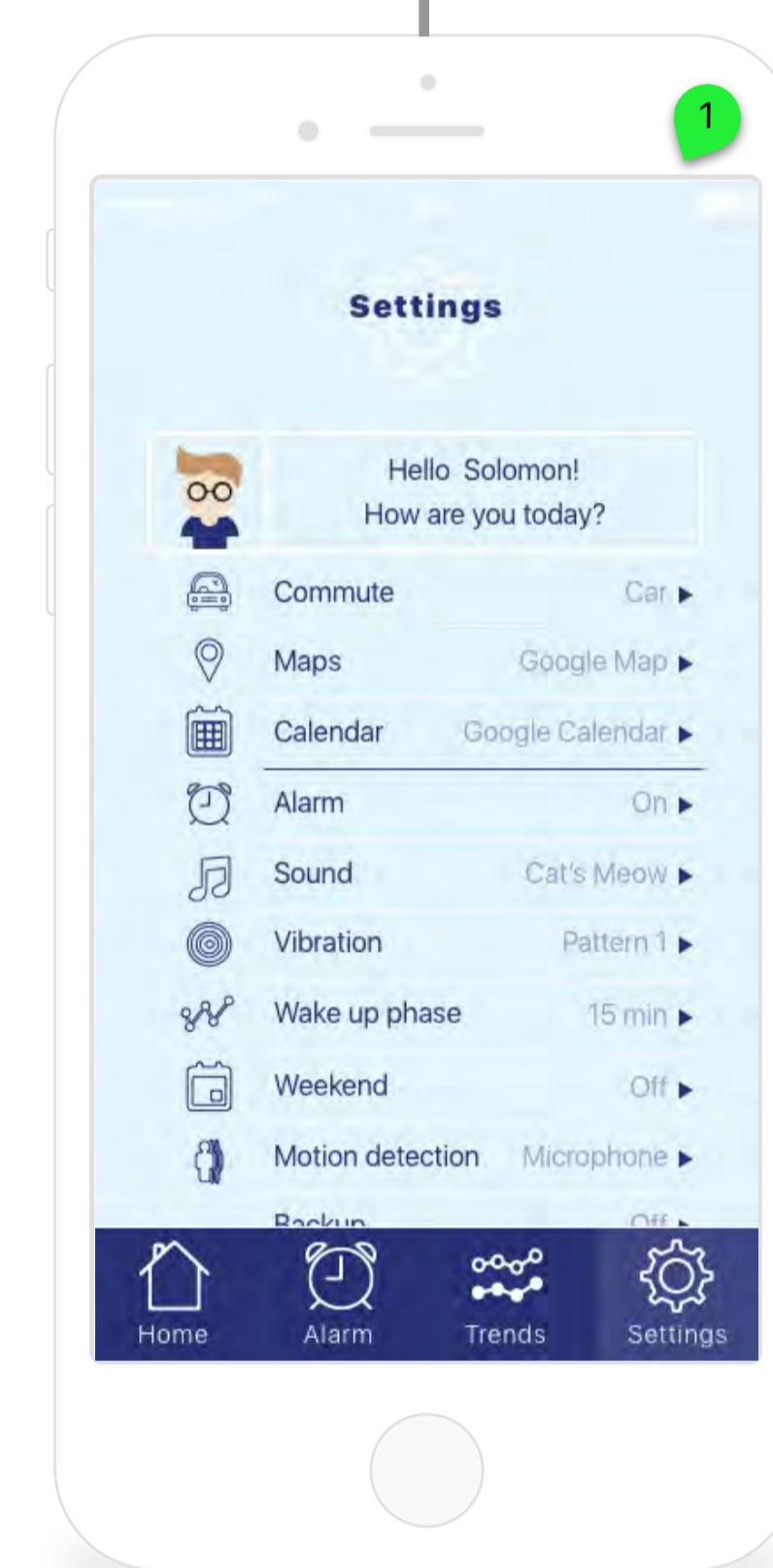
1.



Currently not built out in the prototype.



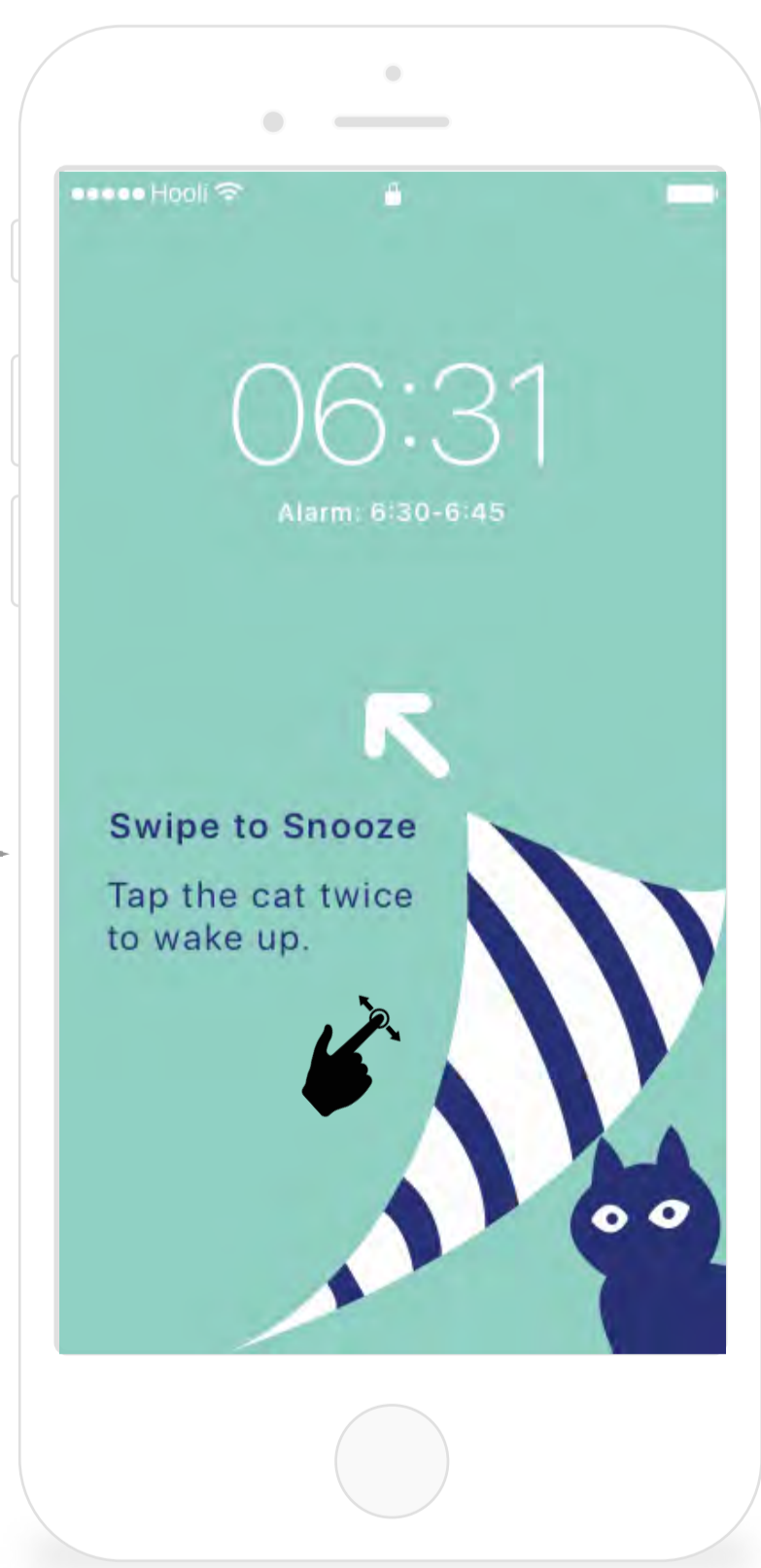
Currently not built out in the prototype.



Currently not built out in the prototype.

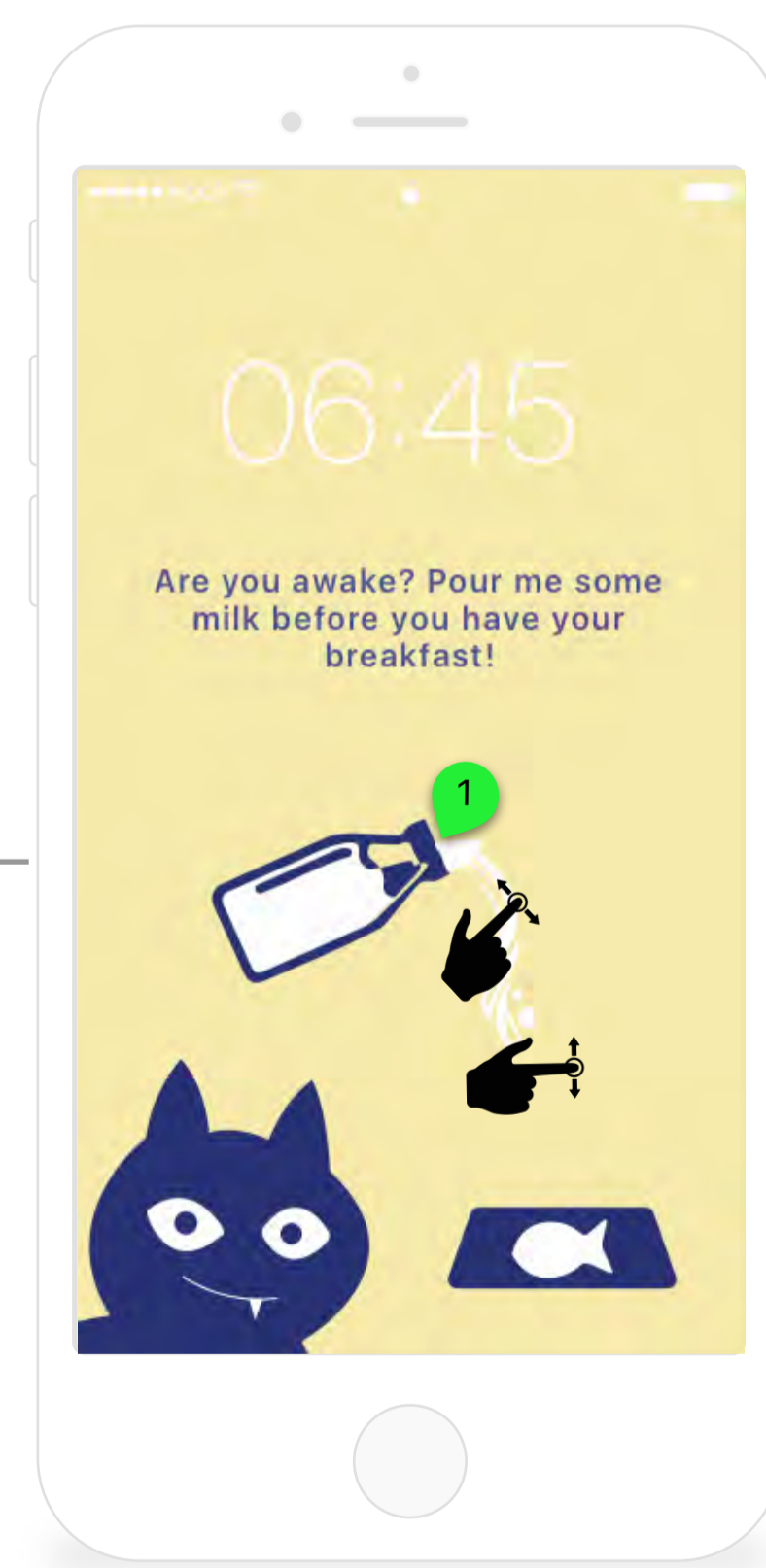


1. Upon scrolling to the bottom, you click anywhere in the blue bar to go into sleep mode.

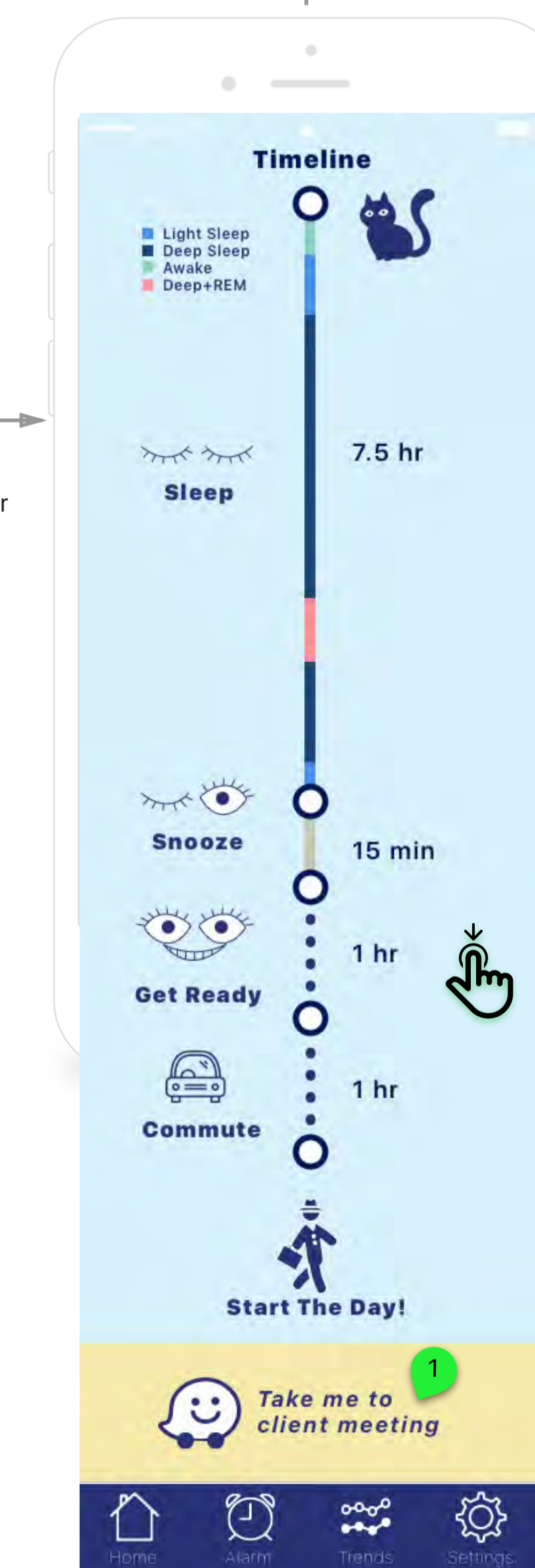


Wake Up

Snooze



1. Tap on the milk bottle and then swipe towards the bowl in order to pour the milk.



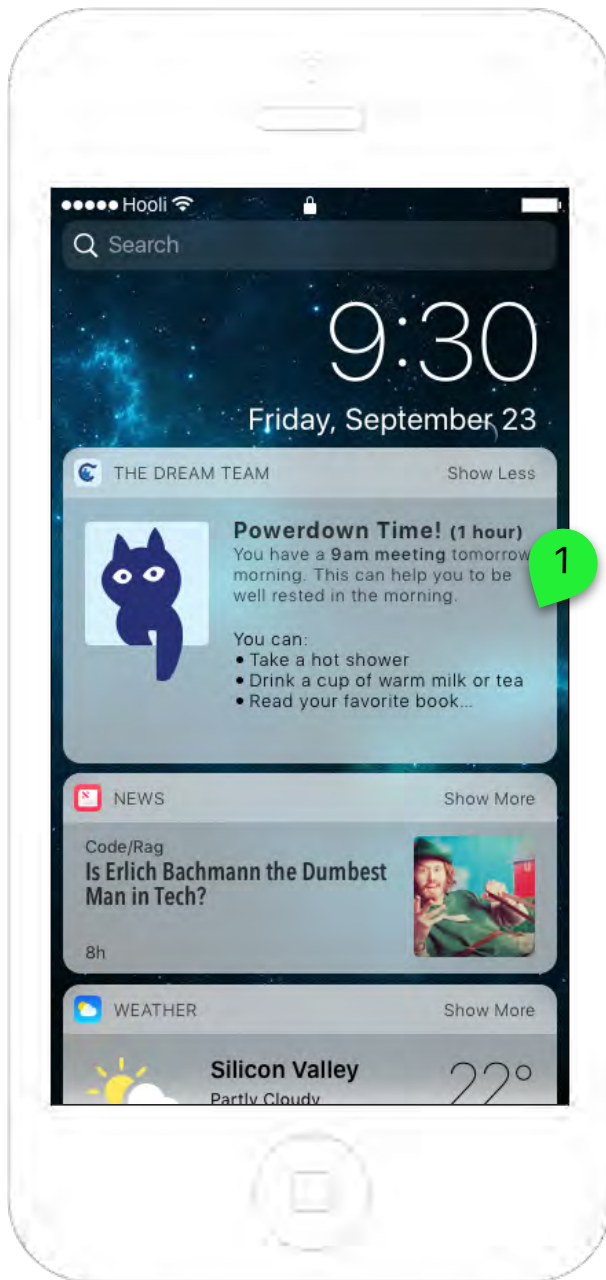
1. Tapping on this button will take you to a client meeting.

High Fidelity Prototype & Annotations

Note: Some annotations blind redacted to protect proprietary and/or sensitive information.



<https://invis.io/SA8IM5546>



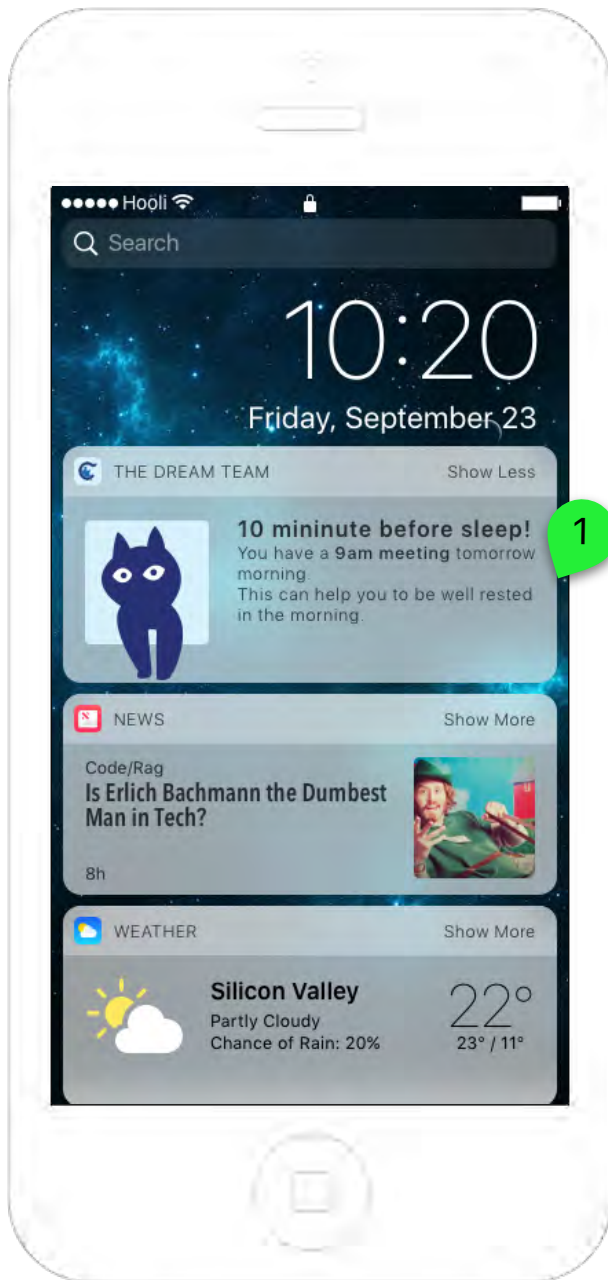
01.00

Annotations

Notes

1. Using settings created by the user, a notification will appear one hour before the user's bedtime in order to remind them to begin winding down.

Propriety information redacted.

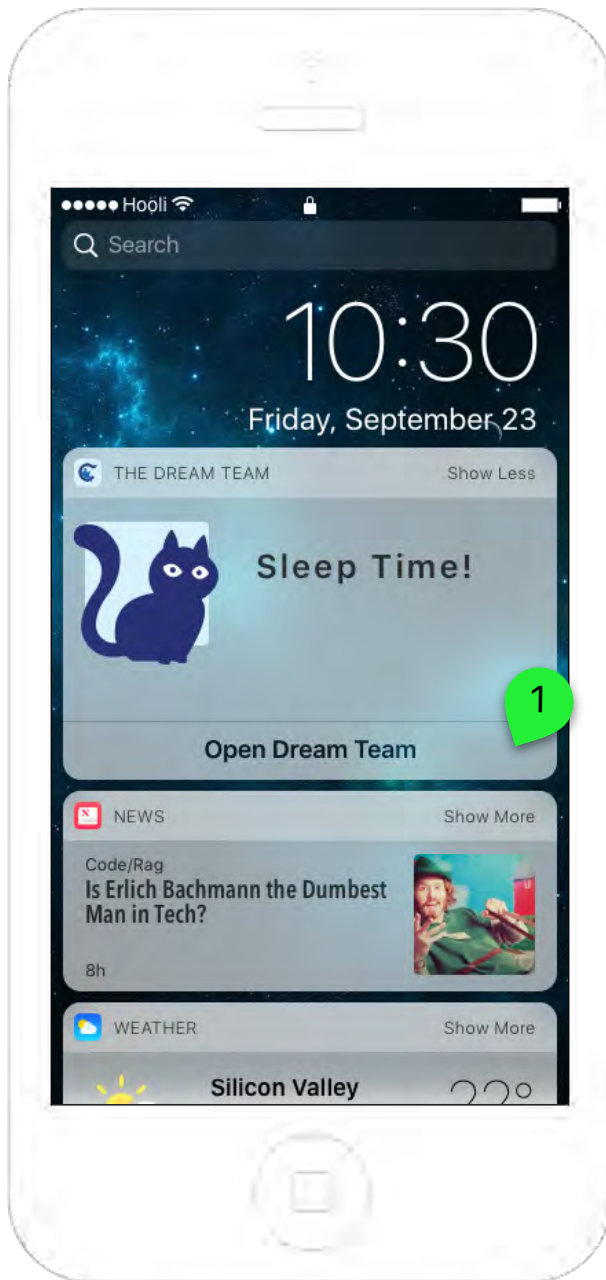


1.01

Annotations

Notes

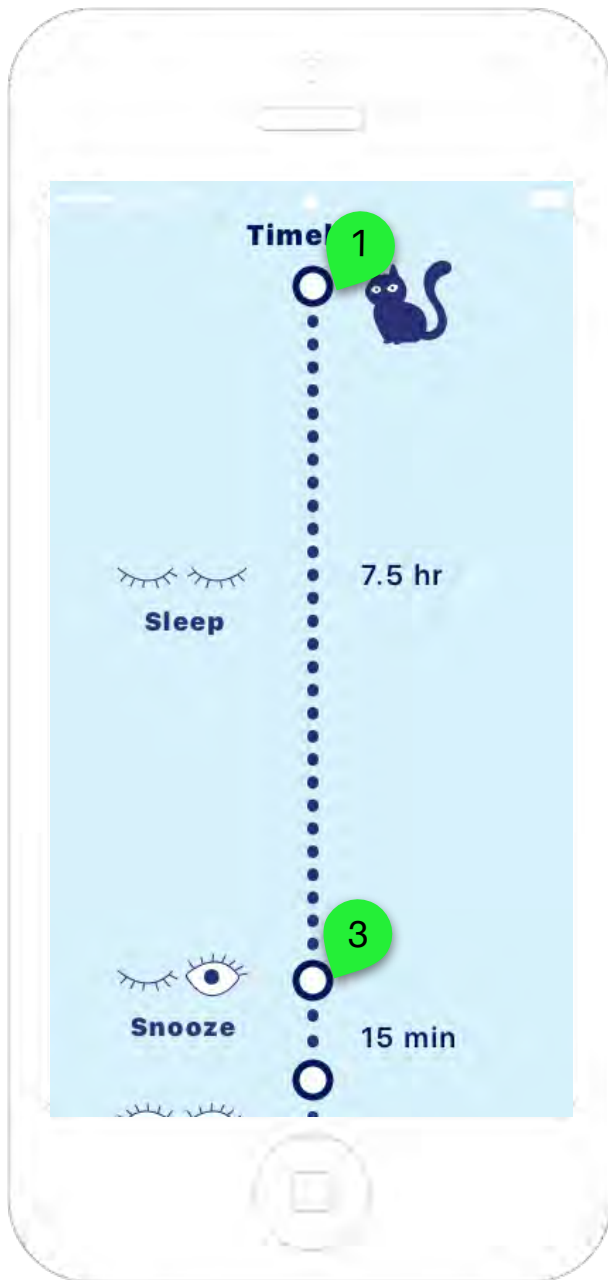
1. Ten minutes before bedtime, the user will receive another notification to once again prompt them to go to bed. Moreover, they will receive a piece of advice decided by the app that is either general or based on previous behavior to further motivate them. As per iOS 10 conventions, the user swipes left to clear the notification.



1.02 Annotations

Notes

1. Once it is the user's bedtime, another notification will be sent in order to indicate this to them. However, this notification will include a prompt to go to bed in order for them to see the timeline and go into sleep mode.



scroll navigation continues on 1.04)

1.03

Annotations

Notes

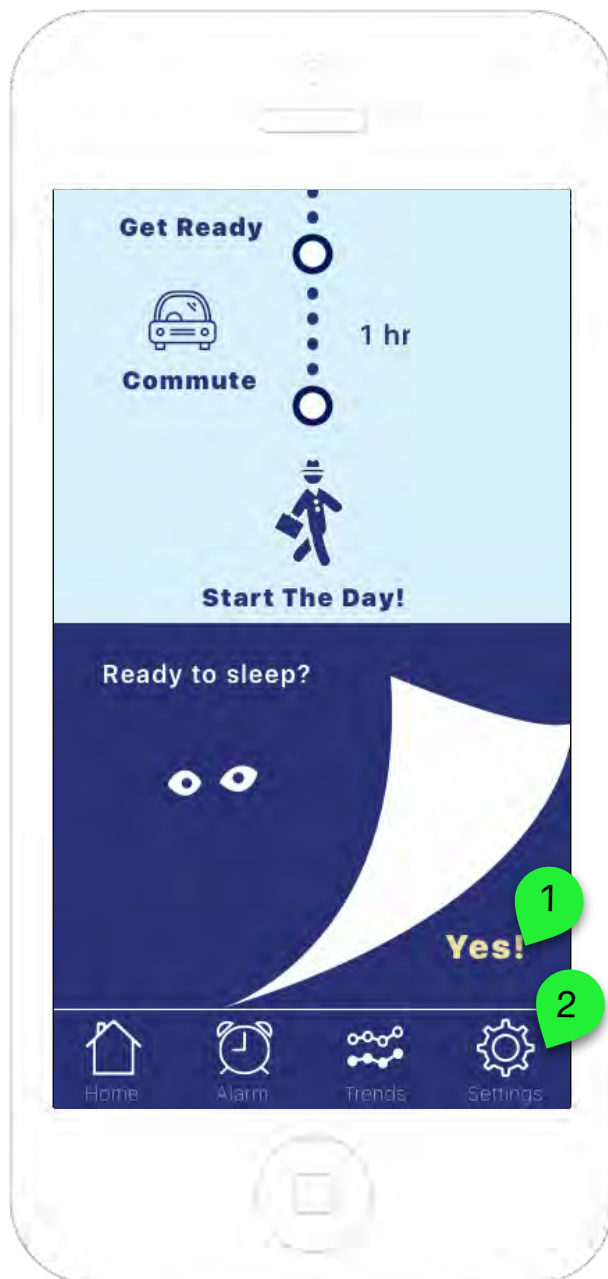
1. The timeline outlines all of the next day's sleep related events including durations of sleep, snoozing, getting ready, and your daily commute. The goal of this page is to delineate your expected routine to establish why you need to get up a certain time and allow the user to change it as they see fit.

This information is aggregated from calendar events, previous user behavior aggregated from their phone's GPS, and traffic conditions.

2. *API Integrations:*

Proprietary information redacted.

3. These round markers on the timeline can be adjusted to reflect the user's goals or to correct the data being presented to them by the application. For example, if they snooze for twenty minutes instead of fifteen, they can adjust by pressing the round milestone marker and adjusting accordingly.

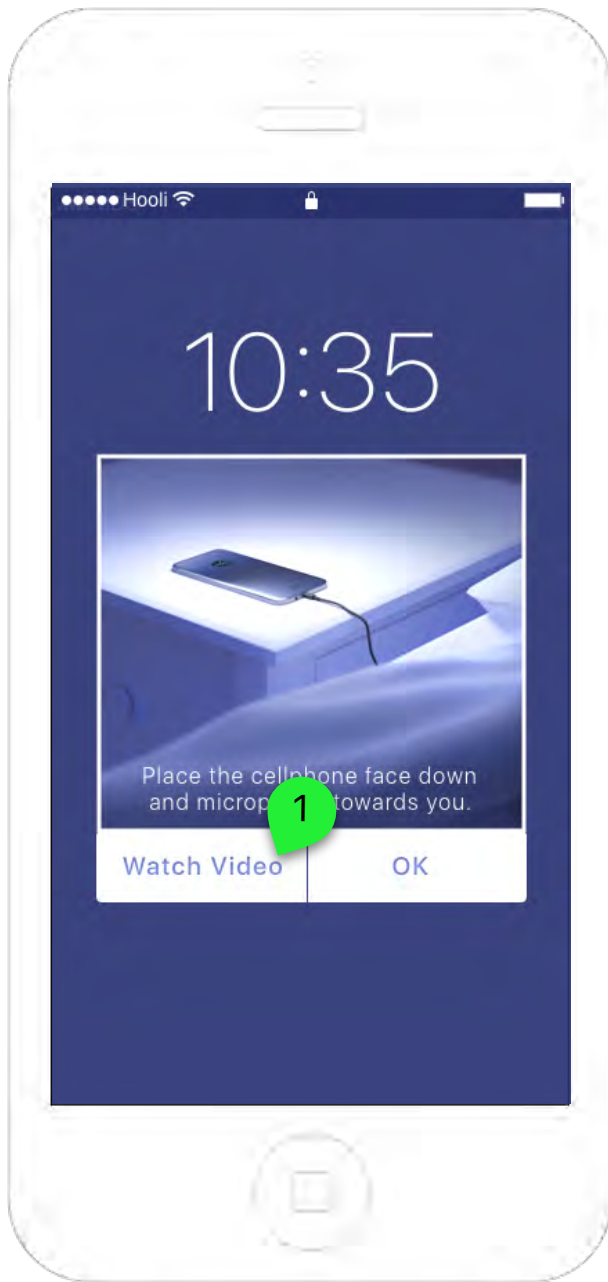


1.04

Annotations

Notes

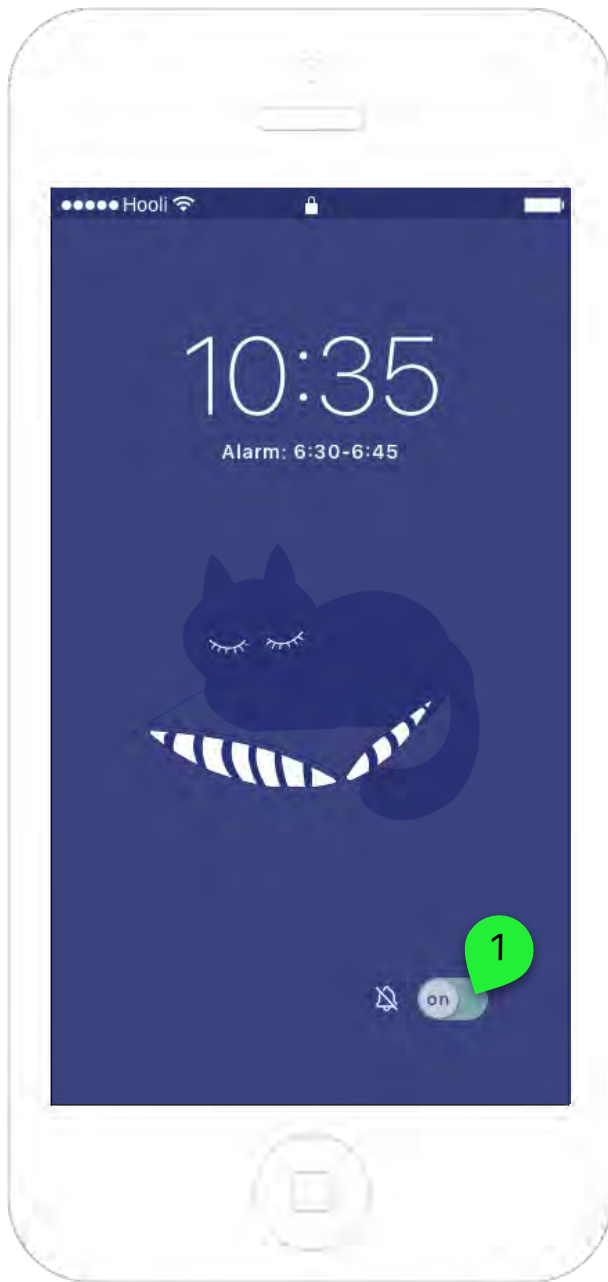
1. Once the user arrives to the bottom of the page, they can enter 'sleep mode' by pressing anywhere in the blue field at the bottom of the page. Likewise, they can also swipe to the left.
2. Lower navigation see (redacted).



01.05 Annotations

Notes

1. Users will be directed to a tutorial video they can then exit out of once they understand how to place their phone. This explanation only applies if you are using the microphone to detect movement. However, in the settings menu, you can also select the accelerometer in which case you would be presented with a photo of how to place the phone on your mattress.

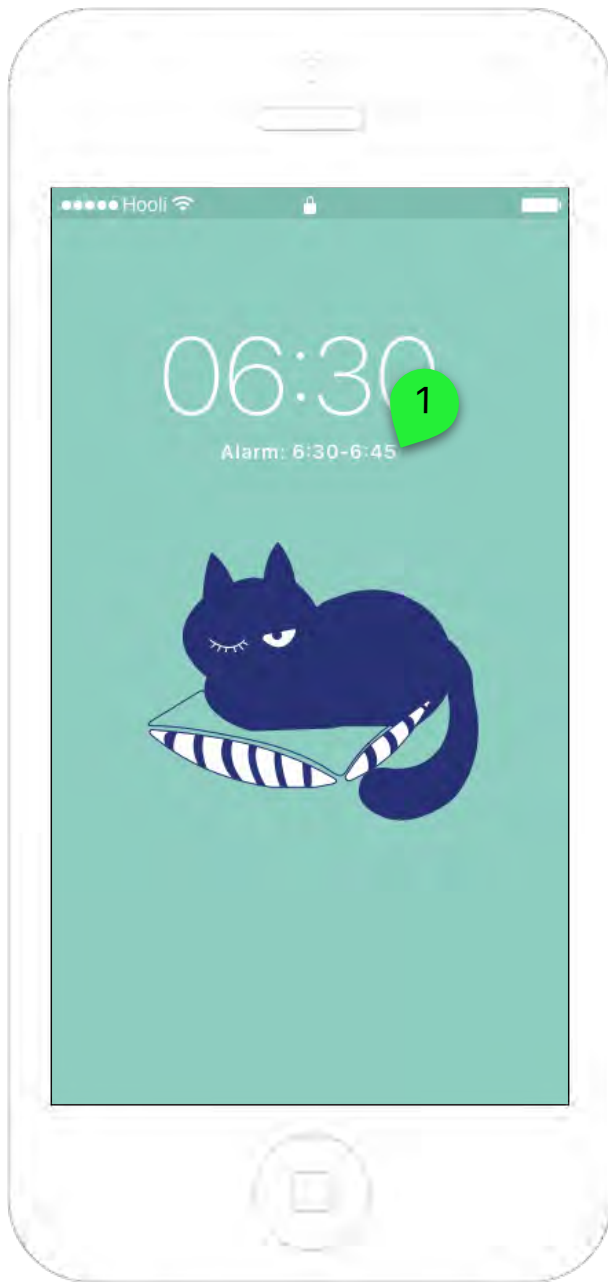


01.06

Annotations

Notes

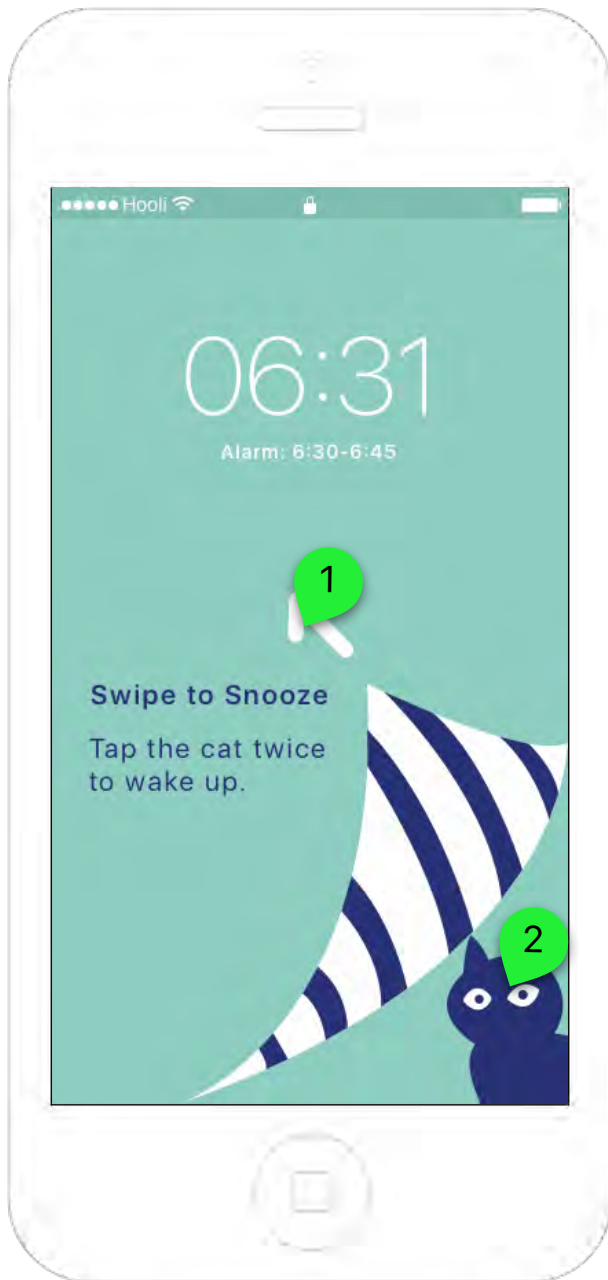
1. Once in sleep mode, the only interaction available to the user will be to adjust the *Do Not Disturb* settings. The default will be to disable notifications while asleep, so they will have to turn this OFF in order to allow notifications while they are sleeping. This is done to minimize distractions while sleeping.



01.07 Annotations

Notes

1. There are no interactions available to the user at this point. However, they are permitted to see the estimated alarm time, which is based on updates on transit and traffic information.



01.08

Annotations

Notes

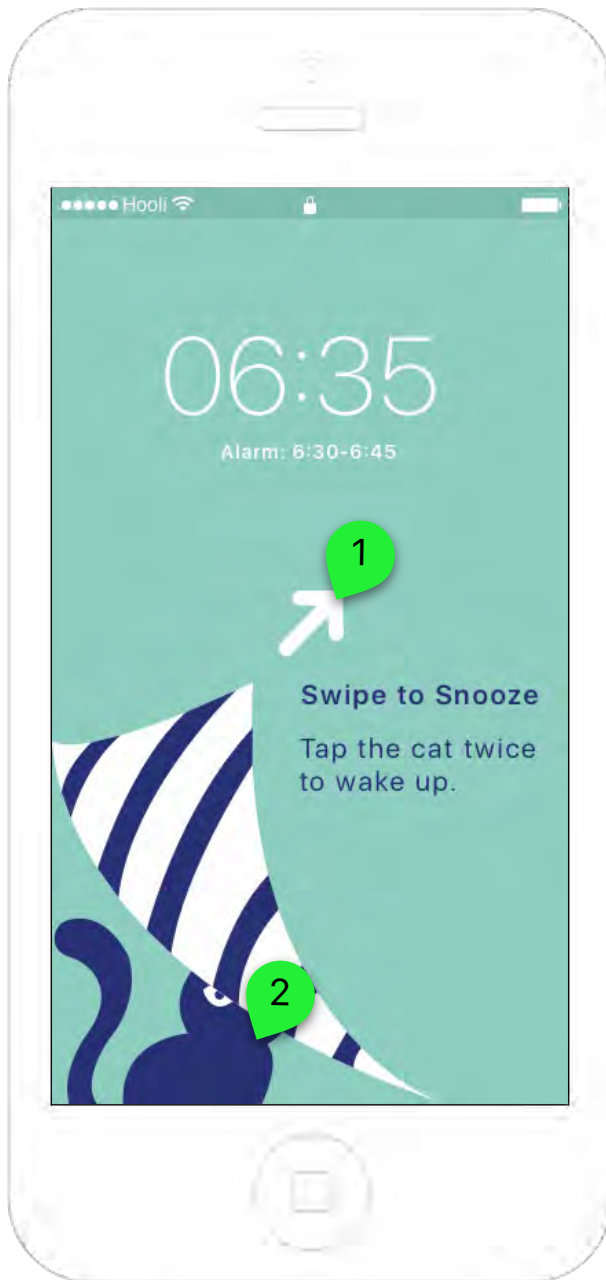
1. Upon the first snooze, the user will be presented with one of these random gestures in order to force them to look at their device. In this case, they have to swipe in a diagonal motion from the bottom right to the top left.
2. If they choose not to snooze, the user can also tap twice on the cat in order to wake up. These instructions are all contained next to one another.

01.09

Annotations

Notes

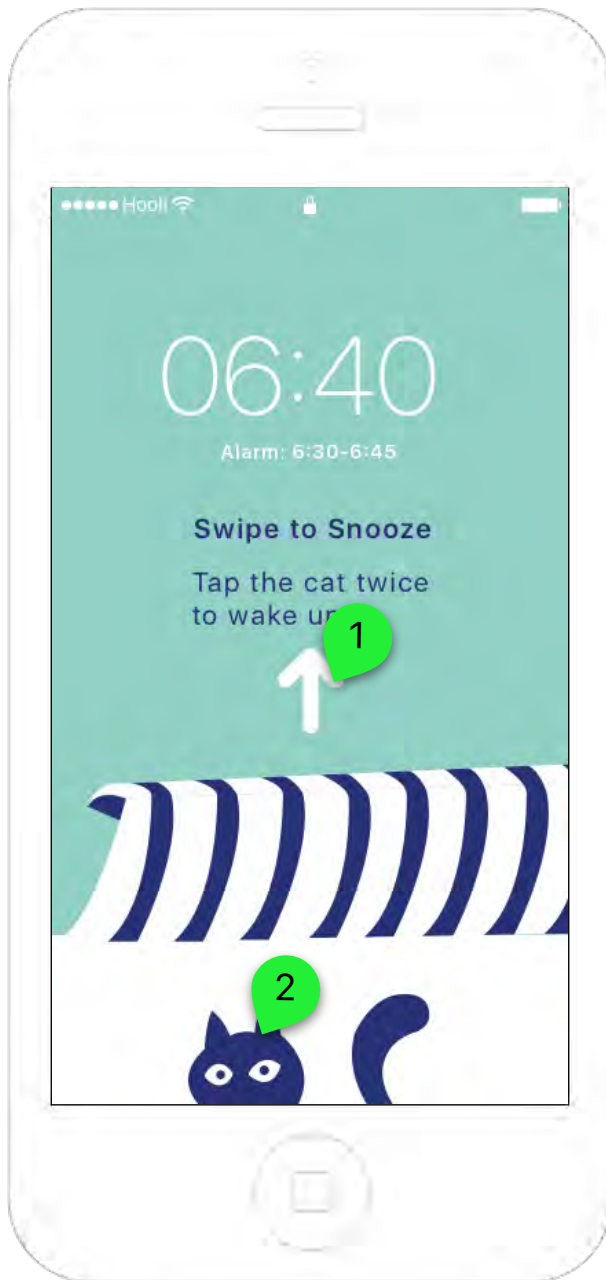
1. Upon the first snooze, the user will be presented with one of these random gestures in order to force them to look at their device. In this case, they have to swipe in a diagonal motion from the bottom left to the top right.
2. If they choose not to snooze, the user can also tap twice on the cat in order to wake up. These instructions are all contained next to one another.

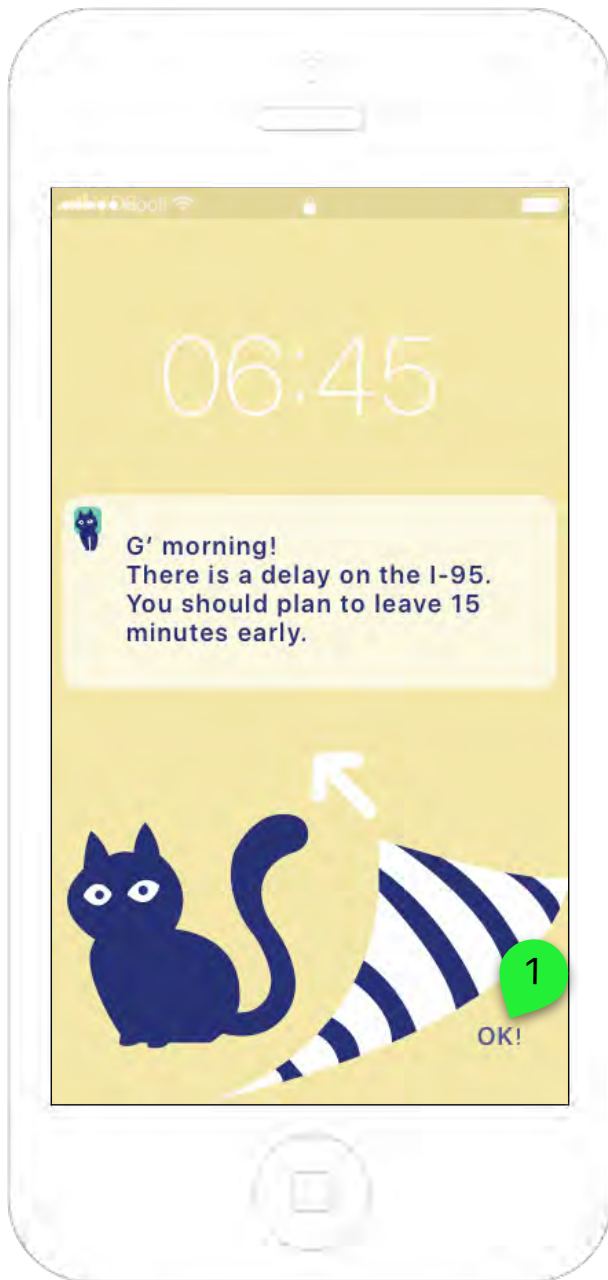


01.10 Annotations

Notes

1. Upon the first snooze, the user will be presented with one of these random gestures in order to force them to look at their device. In this case, they have to swipe from the bottom to the top.
2. If they choose not to snooze, the user can also tap twice on the cat in order to wake up. These instructions are all contained next to one another.



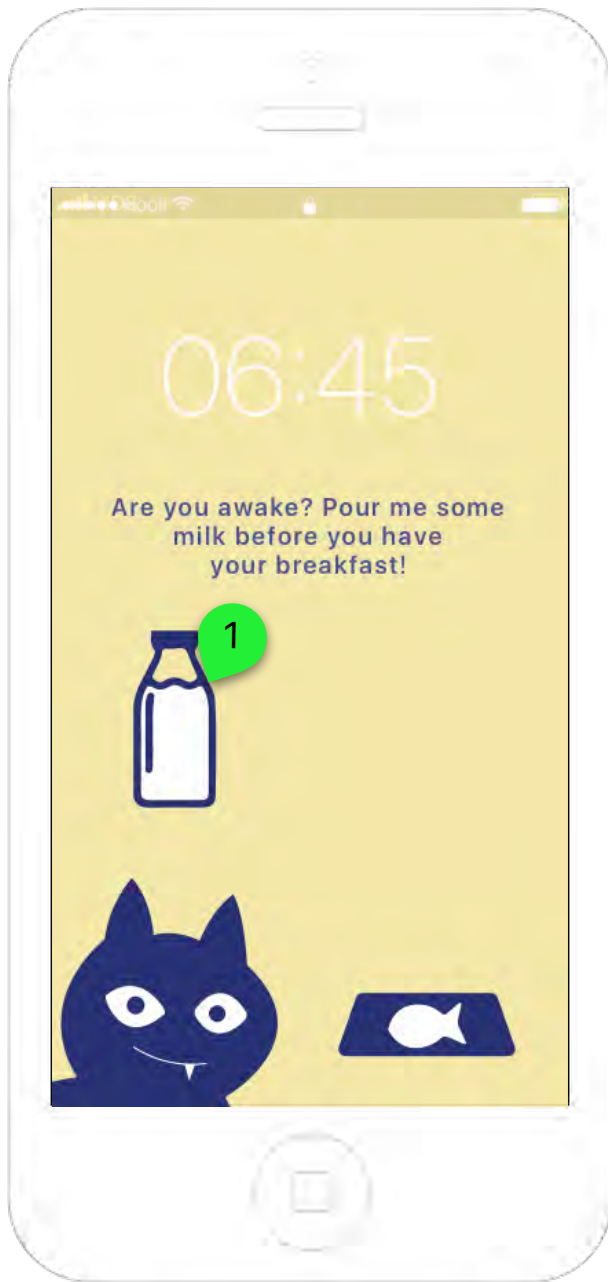


01.11

Annotations

Notes

1. At this point, the user has reached a point where if they snooze again, they will be late for the calendar event based on their previous behavior. As a result, they have been woken up fifteen minutes early. They can either tap or swipe to look at their sleep data and timeline.

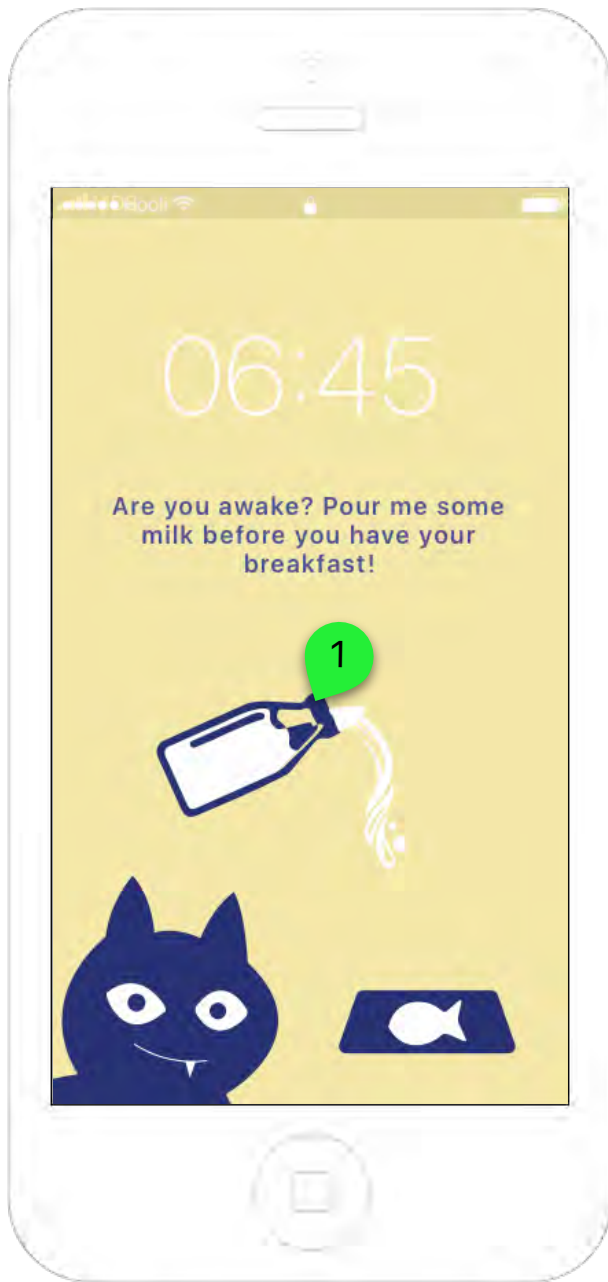


01.12

Annotations

Notes

1. The user is presented with a task in order to prove they are awake. The task is to move tip the milk into the bowl. They will accomplish this by pressing anywhere on the bottle and then make a swipe motion down towards the bowl.



01.13

Annotations

Notes

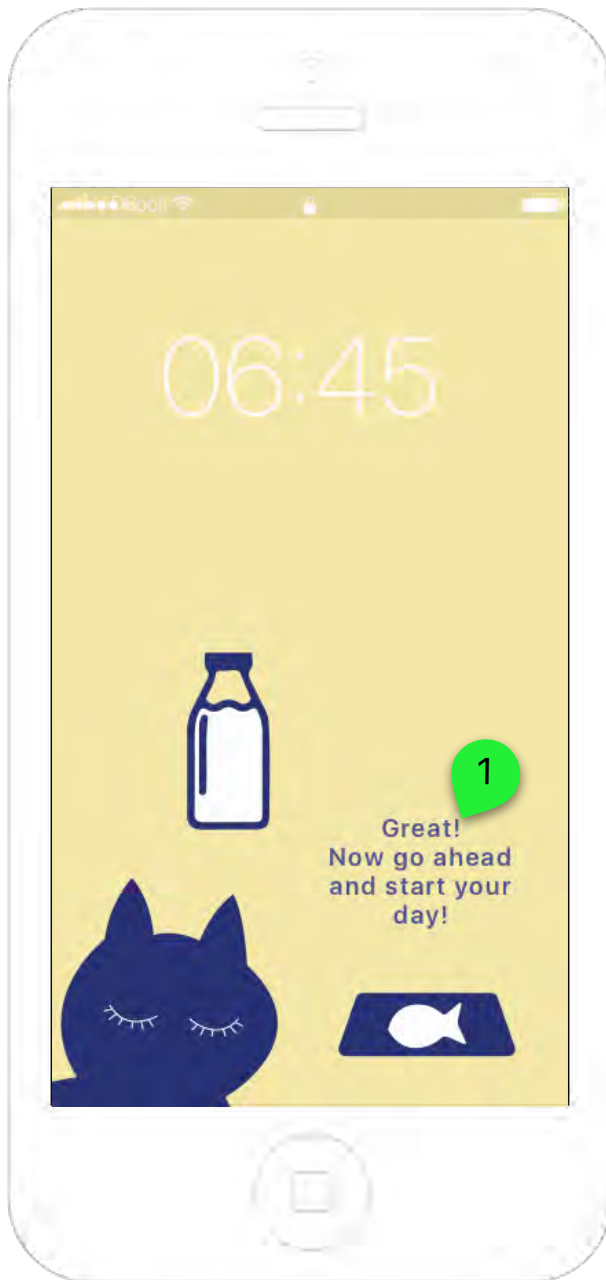
1. At this point, the user has tapped on the top of the bottle, which initiates a reaction on the part of the bottle, namely the milk begins to pour into the bowl. Once the bottle is tilted, the milk will begin to pour out of it until the bowl fills.

01.14

Annotations

Notes

1. Once the bowl is filled, the user gets feedback to indicate they can start their day. In order to move to the timeline, the user can tap on the text, the bowl, or the cat. Likewise, they have the option to swipe to the left.



01.15 Annotations

Notes

1. The post sleep timeline consists of data regarding your different stages of sleep delineated by the different colors.
2. Once again, you can adjust certain parts of the timeline that haven't occurred yet. In this case, the sleep timeline and snooze can't be adjusted as they already happened and are measured based on the timestamp of your interactions with the app. For example, activating sleep mode and how many times you hit snooze.





01.16

Annotations

Notes

1. At the bottom of the timeline, you will be presented a large button that then re-directs you to the traffic app of your choice (information pulled from your calendar events). This link then opens the respective app on your phone with the address you are going to.
2. This overlay appears the first few times you use the app to indicate that you can obtain more sleep data in the trends section. However, this overlay disappears if you tap on it once.

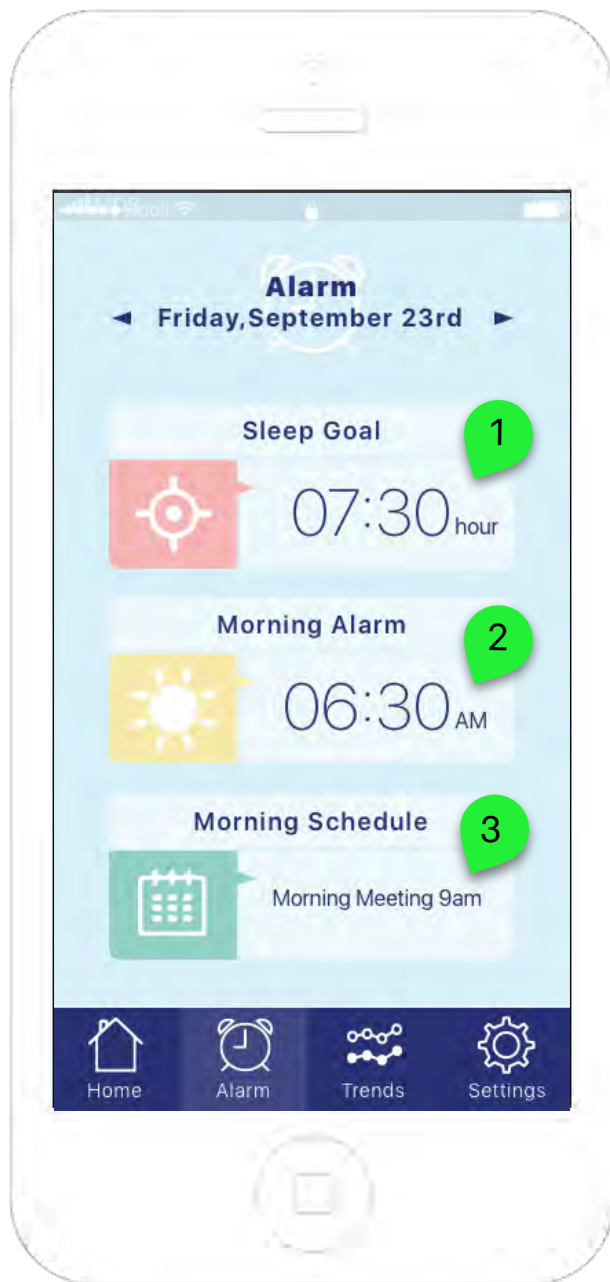
01.17

Annotations

Notes

1. When you enter 'sleep now', it takes you to the sleep module. The sleep module contains the time line that contains a modified timeline with your calendar events.
2. Tapping in 'nap now' will take you the nap module, which features several options for nap lengths based on science. Likewise, you can choose a custom time as well.
3. Alarm mode: tapping here will allow you to change the alarm settings, sleep goals, and look at your schedule.
4. Trends: Aggregates previous nights sleep data as well as insights.
5. Settings: Ability to adjust transit preference, Alarm music, sleep tracking method, etc.



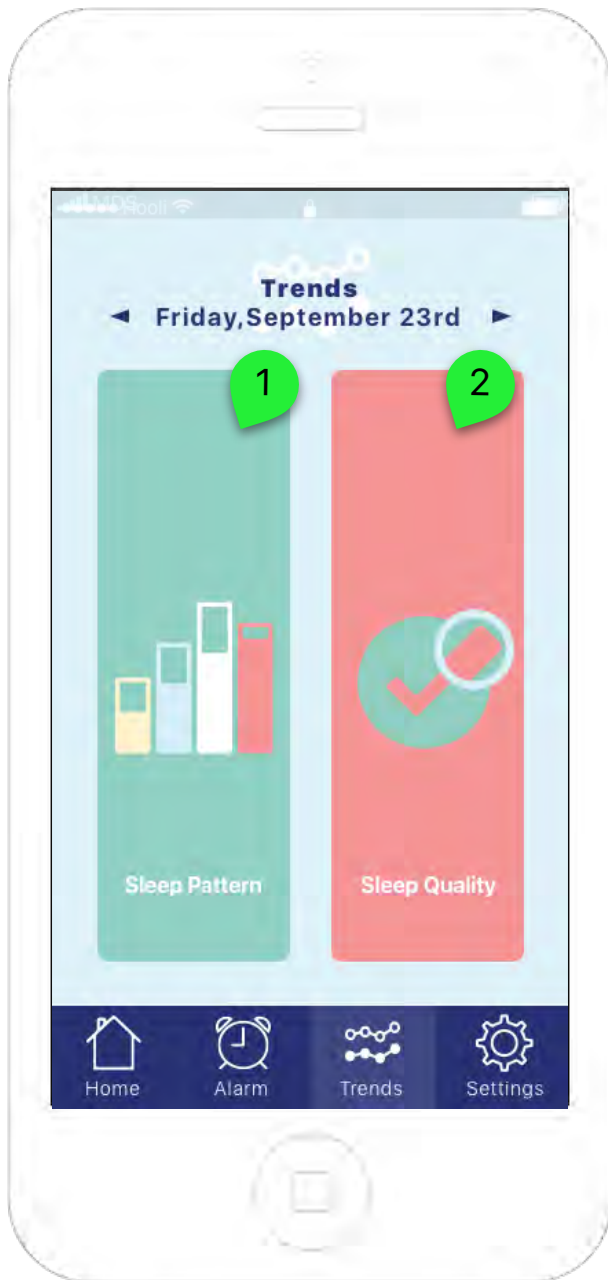


01.18

Annotations

Notes

1. Sleep Goal: Takes you to timeline to modify the sleep goal if you choose. If you prefer to manually adjust it, you need to go settings.
2. Morning alarm: tapping on this setting takes you to the timeline from which you can tap and drag your wake up time.
3. Morning Schedule: This will populate the day's next event, but if you tap, it will open the calendar app.



01.19

Annotations

Notes

1. Sleep Pattern: Offers rich log of sleep data such as REM, light sleep, etc.
2. Sleep Quality: Offers simple breakdowns of your sleep data alongside proposed goals and insights, which you can either include in your goals or not.

01.20

Annotations

Notes

1. Commute: Choose whether or not the app aggregates transit or traffic information related to your destinations.
2. Motion Detection: Choose between accelerometer and microphone to measure your sleep. This will affect which tutorial appears in screen 1.05.

